

## Chain A, Structure Of Taq Dna Polymerase

PDB: 1TAQ\_A

[FASTA Graphics](#)

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• Comment
• Features
• Sequence

LOCUS       1TAQ_A                               832 aa           linear   BCT 24-SEP-
2008
DEFINITION   Chain A, Structure Of Taq Dna Polymerase.
ACCESSION    1TAQ_A
VERSION      1TAQ_A GI:157833899
DBSOURCE     pdb: molecule 1TAQ, chain 65, release Aug 27, 2007;
              deposition: Jun 4, 1996;
              class: Nucleotidyltransferase;
              source: Mol_id: 1; Organism_scientific: Thermus Aquaticus; Gene:
              Taq; Expression_system: Escherichia Coli;
              Exp. method: X-Ray Diffraction.

KEYWORDS     .
SOURCE       Thermus aquaticus
ORGANISM     Thermus aquaticus
              Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
              Thermus.
REFERENCE    1 (residues 1 to 832)
AUTHORS      Lawyer,F.C., Stoffel,S., Saiki,R.K., Myambo,K., Drummond,R. and
              Gelfand,D.H.
TITLE        Isolation, characterization, and expression in Escherichia coli
of
              the DNA polymerase gene from Thermus aquaticus
              J. Biol. Chem. 264 (11), 6427-6437 (1989)
              PUBMED 2649500
REFERENCE    2 (residues 1 to 832)
AUTHORS      Kim,Y., Eom,S.H., Wang,J., Lee,D.S., Suh,S.W. and Steitz,T.A.
TITLE        Crystal structure of Thermus aquaticus DNA polymerase
JOURNAL      Nature 376 (6541), 612-616 (1995)
PUBMED      7637814
REFERENCE    3 (residues 1 to 832)
AUTHORS      Eom,S.H., Wang,J. and Steitz,T.A.
TITLE        Structure of Taq polymerase with DNA at the polymerase active
site
JOURNAL      Nature 382 (6588), 278-281 (1996)
PUBMED      8717047
REFERENCE    4 (residues 1 to 832)
AUTHORS      Kim,Y., Eom,S.H., Wang,J., Lee,D.-S., Suh,S.W. and Steitz,T.A.
TITLE        Direct Submission
JOURNAL      Submitted (04-JUN-1996)
COMMENT      SEQRES.
ORIGIN
1 mrgmlplfep kgrvllvdgh hlartfthfah kglttsrgep vqavygfaks llkalkedgd
61 avivvfdaka psfrheaygg ykagraptpe dfprqlalik elvdllglar levpgyeadd
121 vlaslakkae kegyevrilt adkdlyqlis drihvlhpeg ylitpawlwe kyglrpdqwa
181 dyraltgdes dnlpgvkkgig ektarkllae wgsleallkn ldrlkpaire kilahmddik
241 lswdlakvrt dlplevdfak rrepdrerlr aflerlefgs llhefglles pkaleeapwp
301 ppegafvgfv lsrkepmwad llalaaargg rvhrapepyk alrdlkearg llakdlsvla
361 lreglglppg ddpmlalayll dpsnttpegv arryggewte eageeraalse rlfanlwgrl
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421 egeerllwly reverplsav lahmeatgvr ldvaylrals levaeearl eaevfrlagh
481 pfnlnsrdgl ervlfdelgl paigktektg krtsaavle alreahpive kilqyreltk
541 lkstyidppl dlhprtgrl htrfngtata tgrlcccdpn lqnipvrtpl gqrrrgfia
601 eegwllvald ysgielrvla hlsgdenlir vfgegrdiht etaswmfvgp reavdplmrr
661 aaktinfrgl ygmsahrslq elaipeyeeaq afieryqgsf pkvrawiekt leegrrrgyvv
721 etlfgrrryv pdlearkvsv reaaermfn mpvqgtaadl mklamwklfp rleemgarml
781 lqvhdelvle apkeraaava rlakevmegv yplavpleve vgigedwlsa ke

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## DNA polymerase I [Geobacillus stearothermophilus]

GenBank: AAB52611.1

### FASTA Graphics

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• Features
• Sequence
LOCUS       AAB52611                      876 aa                linear    BCT 21-APR-
1997
DEFINITION   DNA polymerase I [Geobacillus stearothermophilus].
ACCESSION    AAB52611
VERSION      AAB52611.1  GI:1205984
DBSOURCE     locus BSU33536 accession U33536.1
KEYWORDS     .
SOURCE       Geobacillus stearothermophilus
ORGANISM     Geobacillus stearothermophilus
              Bacteria; Firmicutes; Bacillales; Bacillaceae; Geobacillus.
REFERENCE    1 (residues 1 to 876)
AUTHORS      Aliotta,J.M., Pelletier,J.J., Ware,J.L., Moran,L.S., Benner,J.S.
              and Kong,H.
TITLE        Thermostable Bst DNA polymerase I lacks a 3'-->5' proofreading
              exonuclease activity
JOURNAL      Genet. Anal. 12 (5-6), 185-195 (1996)
PUBMED       8740835
REFERENCE    2 (residues 1 to 876)
AUTHORS      Kong,H.
TITLE        Direct Submission
JOURNAL      Submitted (04-AUG-1995) Huimin Kong, Research Department, New
              England Biolabs, 32 Tozer Road, Beverly, MA 01915, USA
COMMENT      Method: conceptual translation.
ORIGIN
1 mkkklvlidg nsvayraffa lpllndkgi htnavygftm mnlkilaeeq pthllvafda
61 gkttfrhetf qeykggrqgt ppelseqfpl lrellkayri payldhyea ddiigtlaar
121 aeqegfevki isgdrldtql asrhvtdit kkgitdiepy tpetvrekgy ltpequivdlk
181 glmgdksdni pgvpgigekt avkllkqfgt venvlaside vkgeklkenl rghrdlalls
241 kqlasicrda pvelslddiv yegqdrekvi alfkelgfs flegmaapaa egekpleeme
301 faivdvitee mladkaalvv evmeenyhda pivgialvne hgrffmrpet aladsqfiaw
361 ladedtkkxm fdakravval kwkgielrgv afdlilaayl lnpaqdagdi aavakmkqye
421 avrsdeavgy kgvkrslpde qtlaelvrk aaaiwaleqp fmdllrnneg dqlltkleqp
481 laailaemef tgvnvdtkrl eqmgselaeg lraieqriye lagqefnins pkqlgvilfe
541 klqlpvikkt ktgytsadv leklaphhei venilhyrql gklqstyieg llkvvrpdtg
601 kvhmtfnqal tqtgrlssae pnlqnipirl eegrkirqaf vpeepdlwif aadysqielr
661 vlaiadadden lieafgrdl idhtktamdif hvseeevtan mrrqakavnf givygisdvg
721 laqnlitrrk eaaefieryf asfpgvkqym enivqeakgk gyvttllhr rylpditern
781 fnvrsfaert amntpqgsa adliikkamid laarlkeeql qarllllqvh elileapkee
841 ierlcelvpe vmeqavtlrv plkvdyhygp twydyak

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